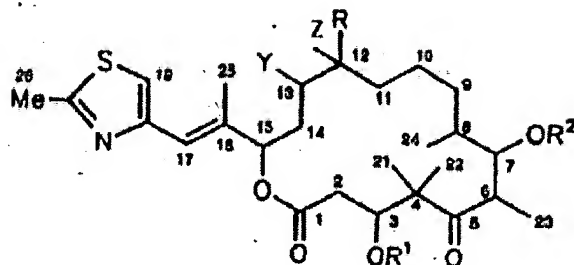


IN THE CLAIMS:

Claims 1-13 (Cancel without prejudice)

14. (New) Epothilon derivative of formula 1



1

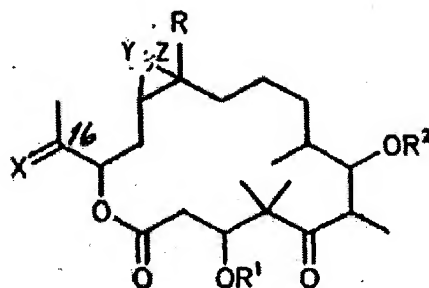
wherein

R = H or C₁₋₄alkyl;

R¹ and R² = H, C₁₋₆alkyl, C₁₋₆acyl, benzoyl, C₁₋₄trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C₁₋₆alkoxy, C₆alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals; and

Y and Z together form a C-C bond of a C=C double bond.

15. (New) Epothilone derivative of formula 4



4

wherein

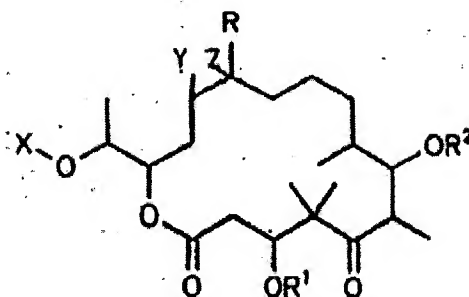
R = H or C₁₋₄alkyl;

R¹, R², R³, R⁴ and R⁵ = H, C₁₋₆alkyl, C₁₋₆acyl, benzoyl, C₁₋₄trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C₁₋₆alkoxy, C₆alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals;

X represents oxygen, NOR³, N-NR⁴R⁵ or N-NHCONR⁴R⁵, wherein the radicals R³ to R⁵ are as defined above and R⁴ and R⁵ may also together form an alkylene group having from 2 to 6 carbon atoms; and

Y and Z are either identical or different and each represents hydrogen, halogen, pseudohalogen, OH, O-(C₁₋₆)alkyl, O-(C₁₋₆)acyl or O-benzoyl, or together form the O atom of an epoxy group or one of the C-C bonds of a C=C double bond.

16. (New) Epothilone derivative of formula 5



5

wherein

R = H or C₁₋₄alkyl;

R¹ and R² = H, C₁₋₆alkyl, C₁₋₆acyl, benzoyl, C₁₋₄trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C₁₋₆alkoxy, C₆alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals; and

X represents hydrogen, C₁₋₁₈alkyl, C₁₋₁₈acyl, benzyl, benzoyl or cinnamoyl; and

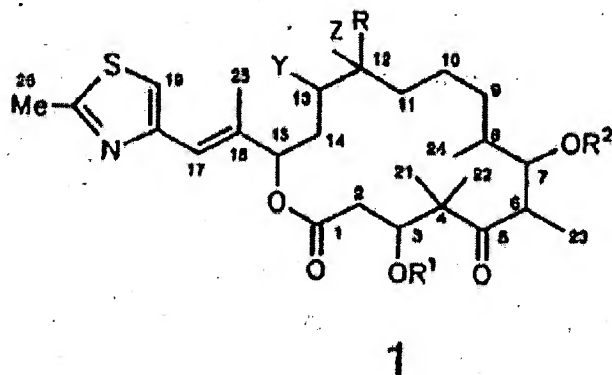
Y and Z are as defined according to claim 15.

17. (New) Process for the preparation of epothilone A and/or 12,13-bisepi-epothilone A, wherein epothilone C is epoxidised, especially with dimethyldioxirane or with a peracid.

18. (New) Process for the preparation of epothilone B and/or 12,13-bisepi-epothilone B, wherein epothilone D is epoxidised, especially with dimethyldioxirane or with a peracid.

19. (New) Composition for plant protection in agriculture and forestry and/or in horticulture, consisting of one or more of the epothilone derivatives of the following formulae 1 to 7:

Epothilone derivative of formula 1



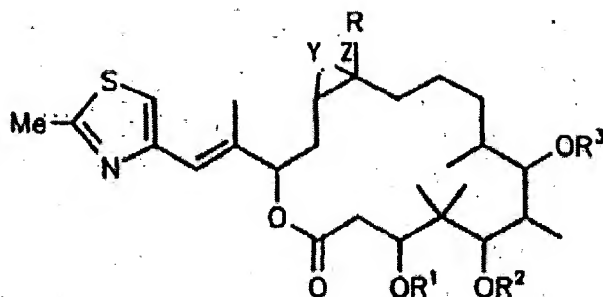
wherein

R = H or C₁₋₄alkyl;

R¹ and R² = H, C₁₋₆alkyl, C₁₋₆acyl, benzoyl, C₁₋₄trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C₁₋₆alkoxy, C₆alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals; and

Y and Z together form the C-C bonds of a C=C double bond;

Epothilone derivative of formula 2



2

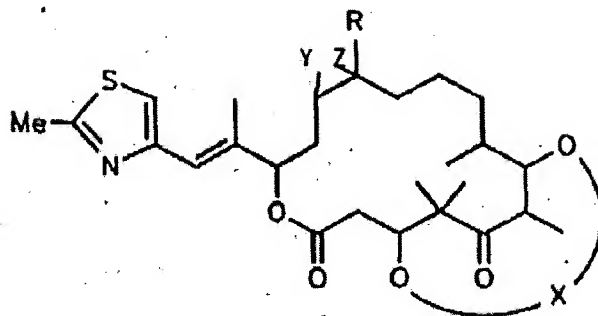
wherein

R = H or C₁₋₄alkyl;

R¹, R² and R³ = H, C₁₋₆alkyl, C₁₋₆acyl, benzoyl, C₁₋₄trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C₁₋₆alkoxy, C₆alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals;

Y and Z are either identical or different and each represents hydrogen, halogen, pseudohalogen, OH, O²(C₁₋₆)alkyl, O-(C₁₋₆)acyl or O-benzoyl, or together form the O atom of an epoxy group or one of the C-C bonds of a C=C double bond.

Epothilone derivative of formula 3



3

wherein

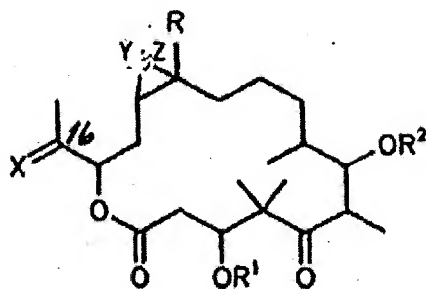
R = H or C₁₋₄alkyl;

R¹ and R² = H, C₁₋₆alkyl, C₁₋₆acyl, benzoyl, C₁₋₄trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C₁₋₆alkoxy, C₆alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals; and

X generally represents -C(O)-, -C(S)-, -S(O)-, -CR¹R²- or -SiR₂-, wherein R, R¹ and R² are as defined above and R¹ and R² may also together form an alkylene group having from 2 to 6 carbon atoms; and

Y and Z are as defined in formula 2 above;

Epothilone derivative of formula 4



4

wherein

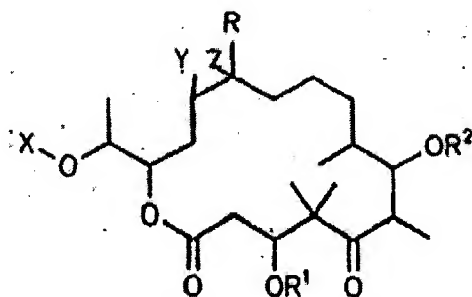
$R = H$ or C_{1-4} alkyl;

R^1, R^2, R^3, R^4 and $R^5 = H, C_{1-6}$ alkyl, C_{1-6} acyl, benzoyl, C_{1-4} trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C_{1-6} alkoxy, C_6 alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals;

X represents oxygen, NOR^3 , $N-NR^4R^5$ or $N-NHCONR^4R^5$, wherein the radicals R^3 to R^5 are as defined above and R^4 and R^5 may also together form an alkylene group having from 2 to 6 carbon atoms; and

Y and Z are as defined in formula 2 above;

Epothilone derivative of formula 5



5

wherein

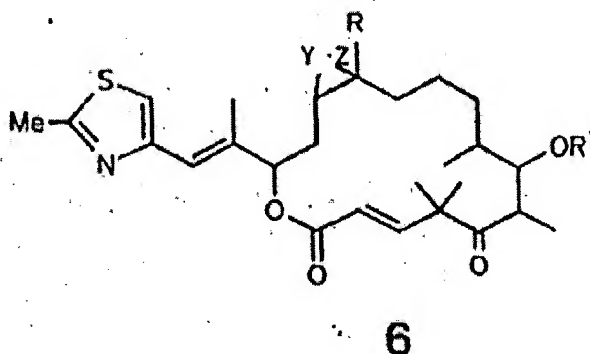
R = H or C₁₋₄alkyl;

R¹ and R² = H, C₁₋₆alkyl, C₁₋₆acyl, benzoyl, C₁₋₄trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C₁₋₆alkoxy, C₆alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals; and

X represents hydrogen, C₁₋₁₈alkyl, C₁₋₁₈acyl, benzyl, benzoyl or cinnamoyl; and

Y and Z are as defined for formula 2 above;

Epothilone derivative of formula 6



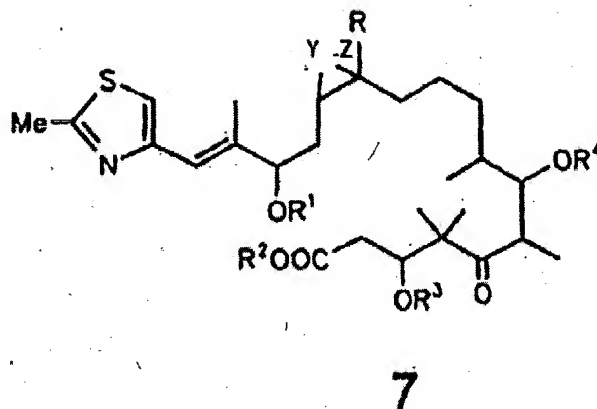
wherein

R = H or C₁₋₄alkyl;

R¹ = H, C₁₋₆alkyl, C₁₋₆acyl, benzoyl, C₁₋₄trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C₁₋₆alkoxy, C₆alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals; and

Y and Z are as defined for formula 2 above;

Epothilone derivative of formula 7



wherein

R = H or C₁₋₄alkyl;

R¹, R², R³ and R⁴ = H, C₁₋₆alkyl, C₁₋₆acyl, benzoyl, C₁₋₄trialkylsilyl, benzyl, phenyl, or benzyl or phenyl each substituted by C₁₋₆alkoxy, C₆alkyl, hydroxy or halogen; and the alkyl and acyl groups contained in the radicals are straight-chain or branched radicals; and

Y and Z are as defined in formula 2 above

20. (New) Therapeutic composition, especially for use as a cytostatic agent, consisting of one or more of the epothilone derivatives according to claim 19 or one or more of the epothilone derivatives according to claim 19 together with one or more common carrier(s) and/or diluent(s).